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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

EIDE, HEIDI MARIE

ART UNIT

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3732

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,824	Applicant(s) DE CLERK, RENE	
	Examiner HEIDI M. EIDE	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 15-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 15-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities: It is believed that "the market element" in line 5 of the claim is in error for --the marker element --.

Appropriate correction is required.

Claim 15 is objected to because of the following informalities: "the market element" in line 8 of the claim is in error for --the marker element --. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. New claim 20 includes the limitation "wherein it is" in line 1 of the claim. It is unclear what "it" is.

Claim 15 recites the limitation "said image" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "the head" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Augthun et al. 2003/0170588 (Augthun) in view of Gelb 5,208,845. Augthun teaches a method to determine the position of a dental implant which is fixed in the bone of a jaw of a person comprising the step of fixing a marker element 32a to a free end of the implant 1 in a detachable manner whereby the marker element is situated at a distance from the free end, as illustrated in fig. 7, determining the position of the marker element in relation to the jaw and identifying the position of the implant from the observed position of the marker element, fixing a support 32 with the marker element to the implant in a detachable manner, fixing the support with the marker element to the free end of the implant such that the support extends in the prolongation of the implant and the marker element is situated at a distance from the free end as illustrated in fig. 7 (par. 6, 9). Augthun further teaches the implant has a central axis, the orientation and position of the central axis being determined by defining a straight line through a center point of the marker element and implant, which is parallel to the longitudinal side of the support as illustrated in fig. 7 and further determining the position of the implant in relation to the jaw on the basis of the orientation and the position of the axis of the

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implant and the distance between the marker element and the free end of the implant (par. 9). Augthun does not specifically teach the marker is spherical, however, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the shape of the marker element taught by Augthun since it has been held that the configuration of the claimed marker was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed marker was significant (*In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) MPEP 2144.04 IV B). Augthun does not specifically teach generating an image of the jaw by means of X-ray (however teaches known prior art methods (par. 6)) wherein the jaw contains the implant with the marker element and determining the position of the marker element in relation to the jaw on the basis of the image and identifying the position of the implant from the observed position of the marker element, determining the central axis of the implant and marker element using the image, wherein the marker element contains at least tantalum, platinum or tungsten and wherein the image is formed by means of computer tomography. Gelb teaches generating an image of the jaw by means of x-ray, more specifically the use of computer tomography (col. 3, ll. 57-62) with a marker element and determining the position of the marker element in relation to the jaw on the basis of the image (col. 2, ll. 17-23, 47-58). Gelb teaches the marker element is made of a material which will show on an x-ray (col. 2, ll. 47-49), however, does not specifically teach tantalum, platinum or tungsten. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Gelb since it has been held to be within the general skill of a worker

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in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice (*In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) MPEP 2144.07). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Augthun in view of Gelb as a matter of obvious design choice to take advantage of a prior art method as taught by Augthun.

Claims 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Augthun et al. 2003/0170588 (Augthun) in view of Gelb 5,208,845 as applied to claim 1 above, and further in view of Hattori 5,989,258. Augthun in view of Gelb teach the invention as discussed above, however, does not specifically teach a second marker element fixed in relation to the implant with a center point in which is not situated on the central axis of the implant wherein on the basis of the observed position of the second marker element, the angular position of the implant in relation to the central axis is determined and the support is made of a material which is transparent to x-rays. Hattori teaches multiple markers 57 fixed in relation to the implant with a center point in which is not situated on the central axis of the implant wherein on the basis of the observed position of the second marker element, the angular position of the implant in relation to the central axis is determined and the support is made of a material which is transparent to x-rays as illustrated in fig. 8 (col. 5, ll. 21-27, col. 7, ll. 5-13). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Augthun in view of Gelb further in view of Hattori since it has been held the mere duplication of the essential working parts of a device involves only routine skill in the art (*In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) MPEP 2144.04 VI B) and

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since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice (*In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) MPEP 2144.07).

Claims 15-17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Augthun et al. 2003/0170588 (Augthun) in view of Hattori 5,989,258. Augthun teaches a support with a marker element 32a for determining the position of a dental implant which is fixed to the jaw of a person, wherein the support has means at one far end to be fixed to the implant in a detachable manner whereas the other far end of the support comprises the marker element, wherein the means for fixing the support to the implant comprises a securing pin as illustrated in fig 7 (par. 12). Augthun further teaches a sleeve 23 with a protrusion 28 whose dimension correspond practically to those of a recess provided in the head of the implant on which the support must be fixed such that the protrusion can be place in a practically fitting manner in the recess and wherein the securing pin is coaxial to the support as illustrated in fig. 7. Augthun does not specifically teach the marker produces a strong contrast in an image compared to the implant, the marker element contains at least one of the metals from the group tantalum, platinum and tungsten and wherein the support is mainly formed of a material which is transparent to x-rays. Hattori teaches the marker is capable of producing a strong contrast in an image compared to an implant. However does not specifically teach the marker element contains at least one of the metals from the group tantalum, platinum and tungsten, however, teaches the marker element is made of an x-ray

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opaque material therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hattori since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice (*In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) MPEP 2144.07). Hattori further teaches the support is made of a material which is transparent to x-rays as illustrated in fig. 8 (col. 5, ll. 21-27, col. 7, ll. 5-13). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Augthun in view of Hattori since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice (*In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) MPEP 2144.07).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Augthun et al. 2003/0170588 (Augthun) in view of Hattori 5,989,258 as applied to claim 15 above, and further in view of Biscup 2005/0059972. Augthun in view of Hattori teach the invention as discussed above, however, does not teach the securing pin is externally threaded. Biscup teaches a securing pin 14 is externally threaded as illustrated in fig. 1. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Augthun in view of Hattori further in view of Biscup as a matter of obvious design choice since Biscup teaches a known means of securing known in the art at the time of the invention.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEIDI M. EIDE whose telephone number is (571)270-3081. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Heidi Eide
Examiner
Art Unit 3732

/John J Wilson/
Primary Examiner
Art Unit 3732

/Heidi M Eide/
Examiner, Art Unit 3732

3/17/2009